<u>Project:</u> Willamette Valley National Wildlife Refuge Complex (WVNWRC) FY 2011 Invasive Species Management with Volunteers

Refuges: William L. Finley, Ankeny and Baskett Slough National Wildlife Refuges

Project Description: In 2011, the WVNWRC is proposing to continue with Year 4 of a major effort initiated in 2008 to control invasive species on the three Willamette Valley Refuges. This project would focus on 13 different invasive plants including tansy ragwort, meadow knapweed, purple loosestrife, scotch broom, Fuller's teasel, Harding grass, reed canary grass, Armenian blackberry, false brome, yellow flag iris, English ivy, Japanese knotweed, and Canada thistle. All treatments sites from previous years would be inspected and the results from the last three years control efforts would be documented. Follow-up treatment actions would be determined during these initial inspections and then additional control efforts would be conducted as needed. Early Detection/Rapid Response elements are incorporated into the project. Last years efforts occurred within a 500 acre area on the three Refuges, and this year surveys will again target 500 acres for invasive species detection/monitoring. All areas would be mapped using standard GPS units. The Friends of the Willamette Valley National Wildlife Refuge Complex would be the primary partner to this effort as they would provide volunteer assistance with the control efforts. The Friends will partner with several other groups such as local Audubon Chapters in this endeavor. Refuge staff will coordinate the control efforts and provide training to all of the volunteers. Control efforts would be accomplished using the most effective known techniques.

<u>Friends Groups, Volunteers and Other Partners:</u> Our primary partner in this effort would be the Friends of the Willamette Valley National Wildlife Refuge Complex. Other groups that would be providing volunteers towards the invasive species control efforts include Corvallis Audubon, Salem Audubon, Greenbelt Land Trust, Oregon State University Fish and Wildlife Department, and various local high schools. In addition, two Refuge Youth Conservation Corps programs at Finley and Baskett Slough Refuges would be assisting with control efforts. Benton County Youth Conservation Program would also be a partner as they have agreed to provide a work crew on Finley Refuge for 12-weeks during the summer of 2011.

Public Outreach and/or Environmental Education: Outreach efforts would continue at various events such as Refuge Open House (March), Oregon Gardens Earth Day (April), Barns and Bluegrass event (May) at Finley Refuge, etc. Outreach and environmental education efforts would also occur during regular meetings of the Friends, Audubon chapters, Greenbelt, etc. In addition, Refuge staff and Friends members would be actively recruiting volunteers at local high schools, OSU, and within the business communities of Corvallis, Monroe, Albany, Dallas, Monmouth, Independence and Jefferson. The Refuge Friends group would also be providing a great deal of outreach and educational efforts through the Wild Goose Nature Store in the Complex Office. Environmental education would be a major part of the three Youth Corps programs that would be assisting with this project.

<u>Post-treatment Monitoring:</u> Refuge staff will continue with post treatment monitoring similar to what was completed in prior years when all control efforts were mapped with GPS units and this data was downloaded onto printed versions for management purposes. A summary was prepared after last years control efforts that documented the control work occurred, what control actions were employed, hours expended, costs, etc. We would prepare a similar summary documenting the work in 2011.

<u>Criteria for Project Success:</u> Several work party days are planned whereby Friends and other volunteers will be assisting Refuge staff with various control efforts. The goal of a minimum of 100 volunteers will be employed during these work days. All of these volunteers will be trained to identify and then conduct the proper control method in regards to multiple invasive species that exist on the WVNWRC.

Monitoring last years treatment efforts and the effectiveness is a large part of this years efforts. Those results will help guide our efforts in 2011. We plan to visit all of the prior years control sites to document the effectiveness of 2010 treatments. We plan to repeat this protocol in 2012. We expect to find that our previous control efforts were highly successful meaning that invasive species populations were reduced significantly on the majority of treated areas.

Increasing our effectiveness on controlling invasive species on the Willamette Valley Refuges will help recover several endangered plant populations and an endangered butterfly that relies on a host plant that is threatened by several invasive plants. A more effective invasive species control program will also result in an improvement in the quality of habitat within several habitat types that are considered to be unique and rare such as wet prairie, upland prairie, oak savanna, riparian, etc.

The overall design and therefore ultimate success of the project is based on the various elements of Early Detection/Rapid Response. We have incorporated outreach and educational efforts, proper surveying, mapping and monitoring components, immediate treatment actions, etc, in order to help ensure a high degree of success.

Budget: We are requesting \$20,000 to help defray the costs of this effort.

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